# ANNUAL DRINKING WATER REPORT
## *TOWN OF HAMPSTEAD, CARROLL COUNTY, MARYLAND*

**JUNE 2009**
**PWSID: 0060003**

By law, the Town of Hampstead must provide customers with an annual report on water quality. We are pleased to provide you with the Annual Quality Water Report for 2008. **Our municipal water meets all Federal and State requirements.**

In Hampstead, we take great pride in providing the community with a safe and dependable supply of drinking water. Our water source is the Wissahickon aquifer, which lies about 300 feet below the earth's surface. An aquifer is an underground river that we tap by drilling wells and pumping the water to the surface for distribution. The 300 feet of earth between surface sources of contamination and this underground river help to purify water. The aquifer is a natural source of quality water, naturally replenished by rainfall. From a system of deep wells, water moves through our treatment facilities and storage towers to your homes or businesses.

At this end of this report, you will find a list of ways you can help protect our aquifer. Please take a moment to read these suggestions **and help us protect our drinking water supply**.

During the past year, the Town has operated its water system using 12 out of 17 water production wells. Within the next year or two, we hope to bring all 17 wells online. This is how Hampstead plans to accomplish this ambitious goal.

The Town Council has approved a contract to purchase and install manganese filtration equipment in Pump House 16 (Westwood Park, Section 2). This will allow the Town to resume use of Well 32. Construction should begin this summer.

Design and engineering work continues on the Town's "Super Pump House" (SPH) project. The SPH is a large treatment facility planned for a vacant parcel of land in North Carroll Farms off Upper Forde Lane. The construction of the SPH will allow the Town to connect its final two wells under the existing permit.

The SPH may serve additional wells including Wells 20 and 21. These wells are out of service for two reasons. One, the wells have elevated nitrate levels. Two, the wells are located on property currently owned by Carroll Hospital Center. While the Town was unable to reach an agreement with the Hospital to convey the wells to the Town, we understand that the Carroll County Industrial Development Authority is moving to purchase the property. Town officials have discussed the situation with representatives of the IDA and believe an agreement to return the wells to the Town can be reached.

The construction of the SPH will cost roughly $1.8 million and require the Town to issue municipal bonds to finance the project. The recent economic downturn has caused turmoil in the bond markets, but the Town remains hopeful that the project will go to bid late this year and construction will begin in Spring 2010.

With the manganese equipment installed for Well 32, the "reacquisition" of Wells 20 and 21 and the construction of the Super Pump House, the Town should have all 17 municipal wells in production. The Town conducted exploratory drilling on the SPH site. While the drilling only located two very low

yielding wells, the Town may be able to use one and secure a modest increase in system capacity.

Earlier this year, the Maryland Department of Environment approved the Town's groundwater appropriation permits for 580,000 gallons per day. On a positive note, the permit issuance concluded a very long and frustrating application process. On the downside, the permit presumes that all 17 Town wells are in service and the 580,000 gallons per day represents far less water than the Town, independent experts and engineering consultants believe the wells will produce.

Rather than immediately pursue an expensive and contentious appeal of the permit decision, the Mayor and Council chose to focus on the aforementioned projects. The Town remains strongly committed to the development of additional capacity to ensure both an adequate reserve supply of water and to offset any further decreases in appropriations by state officials. To this end, the Town has continued moving forward on the acquisition of an irrigation well from the Oakmont Green Golf Course. Last year, the Town made an offer for the irrigation well. This offer was rejected and the Town was forced to take legal action to acquire the well through the eminent domain process. The trial is scheduled for September.

While major capital expenditures and legal action paint a gloomy picture, there is good news. Due to water restrictions and your conservation efforts, Hampstead's annual average daily use of water fell from around 460,000 gallons per day in 2007 to 421,000 gallons per day last year. This is well below the 580,000 permit threshold and less than the old permit quantity of 521,400 gallons per day. Unlike other municipalities, the Town is not under an administrative consent order or other state restrictions. The quality of Hampstead's municipal water continues to be quite good as evidenced by this report. The Town continues to maintain its reputation as an outstanding municipal water system.

While the Town's agenda is admittedly ambitious, the events of the past six years have reinforced the importance of working on multiple tracks. To ensure an adequate supply of safe drinking water for the community, Hampstead must acquire new water sources, manage demand, challenge draconian state regulations, explore innovative options such as water reuse and promote conservation. All of these strategies come together in the Town's long range planning process.

Town officials are in the midst of updating the Community Comprehensive Plan. This Plan can (and will) change the zoning on parcels. One important aspect of future growth and development is the capacity of infrastructure like roads, schools, sewer and water. The Town is working actively with Carroll County and the seven other municipalities to develop a county-wide Water Resources Element as part of this plan. The Town also participates in the County's Water Resources Coordinating Council. For the Town to provide the highest quality of water at the lowest possible price requires not only careful planning but interjurisdictional coordination and cooperation.

When the Town of Hampstead started providing water to its residents in 1937, times were simpler. While the regulations and requirements for operating a water system have changed greatly over the past 70 years, the bottom line has not. Every day, the Town provides you, your family and your business with an ample supply of clean, safe drinking water that meets every state and federal standard. The rest of this report is mostly technical information demonstrating exactly that. We are proud to serve you as a municipal water system and work every day to maintain your trust and confidence.

This is the "consumer confidence report." An important part of maintaining your confidence as a Town of Hampstead water customer is giving you an adequate supply of information along with your supply of water. Every municipal water system in the Piedmont area faces the same technical challenges. We are

responding to these challenges with the energy, commitment and innovation that have made Hampstead one of the most highly regarded small water systems in the state.

This report contains valuable information including water testing data. Much of this information is highly technical. If you need assistance or have questions, our Public Works staff will do their best to answer them. We have an outstanding small Public Works Department led by Roger Steger and Kevin Hann. Our water operators are Richard Armacost, Mike Harris, Henry Black and Toby David. Dennis Warehime, our newest Public Works employee, is in training for his water operator's license. Pat Warner, our long-time Town Clerk, is now helping out as the administrative support staff person for the Department. These hardworking Town employees do a great job maintaining our community water system.

Please note that some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice from their health care providers about drinking water. EPA/CDC guidelines on appropriate means to lessen the risk of infection by cryptosporidium and other microbiological contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

If you have any questions about this report or concerning your water utility, please contact Public Works Superintendent Roger A. Steger or Assistant Superintendent Kevin L. Hann at 410-239-6659. We want our customers to be informed about their water utility. If you want to learn more, please attend any of our regularly scheduled council meetings. They are held on the second Tuesday of every month beginning at 7:30 p.m.

The Town of Hampstead Water Department routinely monitors for constituents in your drinking water according to Federal and State laws. The tables in this report show the results of our monitoring for the period of January 1st to December 31st, 2008. As water travels over the land or underground, it can pick up substances or contaminants such as microbes, inorganic and organic chemicals, and radioactive substances. All drinking water, including bottled drinking water, may be reasonably expected to contain at least small amounts of some constituents. It's important to remember that the presence of these constituents does not necessarily pose a health risk.

The Town of Hampstead in conjunction with the Maryland Department of the Environment has completed our Source Water Evaluation Assessment Plan. In this plan, the boundaries of the areas providing source water have been delineated, as well as identified problems such as operational, short term, long term, sources of contamination, and solutions to correct any problems. A copy of the plan will be available to view, at the Hampstead Town Hall, 1034 S. Carroll Street, Hampstead.

In this table you will find many terms and abbreviations you might not be familiar with. To help you better understand these terms we've provided the following definitions:

*Non-Detects (ND)* - laboratory analysis indicates that the constituent is not present.

*Parts per million (ppm) or Milligrams per liter (mg/l)* - one part per million corresponds to one minute in two years or a single penny in $10,000.

*Parts per billion (ppb) or Micrograms per liter* - one part per billion corresponds to one minute in 2,000 years,

or a single penny in $10,000,000.

*Parts per trillion (ppt) or Nanograms per liter (nanograms/l)* - one part per trillion corresponds to one minute in 2,000,000 years, or a single penny in $10,000,000,000.

*Picocuries per liter (pCi/L)* - picocuries per liter is a measure of the radioactivity in water.

*Millirems per year (mrem/yr)* - measure of radiation absorbed by the body.

*Nephelometric Turbidity Unit (NTU)* - nephelometric turbidity unit is a measure of the clarity of water. Turbidity in excess of 5 NTU is just noticeable to the average person.

*Action Level* - the concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.

*Treatment Technique (TT)* - (mandatory language) A treatment technique is a required process intended to reduce the level of a contaminant in drinking water.

*Maximum Contaminant Level* - (mandatory language) The "Maximum Allowed" (MCL) is the highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.

*Maximum Contaminant Level Goal* - (mandatory language) The "Goal"(MCLG) is the level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.

| TEST RESULTS-Well 11 And Well 12 @ Plant Id: 02 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .071 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chromium | NO | 1 | ppb | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| Nickle | NO | 5 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Nitrate (as Nitrogen) | NO | 7.0 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 7.3 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Combined radium | NO | 1.2 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 6.5 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.8 | ppb | 0 | 6 | Discharge from rubber and chemical factories. |
| Atrazine | NO | .427 | ppb | 3 | 3 | Runoff from herbicide used on row crops |
| **Unregulated Contaminants** | | | | | | |
| Radon | NO | 3340 | pCi/L | 0 | 0 | Erosion of natural deposits |

| TEST RESULTS- Well 13 @ Plant Id: 03 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .046 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 5.3 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 4 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Alpha emitters | NO | 3 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.1 | ppb | 0 | 6 | Discharge from rubber and chemical factories. |
| **Unregulated Contaminants** | | | | | | |
| Radon | NO | 2550 | pCi/L | 0 | 0 | Erosion of natural deposits |

| TEST RESULTS- Well 15 Plant Id: 04 |
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| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .059 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nickle | NO | 10 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Nitrate (as Nitrogen) | NO | 6.4 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 9 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Alpha emitters | NO | 5 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) Phithalate | NO | .8 | ppb | 400 | 400 | Discharge from chemical factories |
| Dinoseb | NO | .23 | ppb | 7 | 7 | Runoff from herbicide used on soybeans and vegetables |
| Pentachlorophenol | NO | .03 | ppb | 0 | 1 | Discharge from wood preserving factories |
| Picloram | NO | .14 | ppb | 500 | 500 | Herbicide runoff |
| **Unregulated Contaminants** | | | | | | |
| Chloroform | NO | .8 | ppb | 0 | 0 | By-product of drinking water chlorination. |
| Radon | NO | 2320 | pCi/L | 0 | 0 | Erosion of natural deposits |
| | | | | | | |

| **TEST RESULTS- Well 19 Plant Id: 05** | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .019 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chromium | NO | 1 | ppb | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| Nickle | NO | 2 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Nitrate (as Nitrogen) | NO | 5.8 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Unregulated Contaminants** | | | | | | |
| Radon | NO | 6340 | pCi/L | 0 | 0 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| **Volatile Organic Contaminants** | | | | | | |

**TEST RESULTS- Well 20 And Well 21 Plant Id: 06**

****These wells remain out of service after a violation of the nitrate level was detected during the June 2003, monitoring period. These two wells continue to remain OUT OF SERVICE until the nitrate levels dissipate.****

| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| **Volatile Organic Contaminants** | | | | | | |
| **Unregulated Contaminants** | | | | | | |
| **Radioactive Contaminants** | | | | | | |

**TEST RESULTS- Well 22 And Well 23 Plant Id: 07**

| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | |
| Nitrate (as Nitrogen) | NO | 6.3 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Combined radium | NO | .4 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 1 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1 | ppb | 0 | 6 | Discharge from rubber and chemical factories. |
| **Unregulated Contaminants** | | | | | | |

**TEST RESULTS- Well 24 @ Plant Id: 08**

| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
|---|---|---|---|---|---|---|
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .086 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 6.0 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 10 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Combined radium | NO | 3.2 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 9 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants Well 24 (Continued)** | | | | | | |

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|---|---|---|---|---|---|---|
| Methyl-Tert-Butyl-Ether | NO | .6 | ppb | 0 | 0 | Leaking underground fuel tanks |
| Radon | NO | 3580 | pCi/L | 0 | 0 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.2 | ppb | 0 | 6 | Discharge from rubber and chemical Factories |

| TEST RESULTS- Well 25 @ Plant Id: 08 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .066 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 6.4 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 10 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Alpha emitters | NO | 9 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants** | | | | | | |
| Methyl-Tert-Butyl-Ether | NO | .6 | ppb | 0 | 0 | Leaking underground fuel tanks |
| Radon | NO | 3580 | pCi/L | 0 | 0 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.2 | ppb | 0 | 6 | Discharge from rubber and chemical Factories |

| TEST RESULTS- Well 26 @ Plant Id: 09 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .033 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 5.1 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Radioactive Contaminants** | | | | | | |
| Combined radium | NO | .5 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 2 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants Well 26 (Continued)** | | | | | | |
| Radon | NO | 6955 | pCi/L | 0 | 15 | Erosion of natural deposits. |

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|---|---|---|---|---|---|---|
| Methyl-Tert-Butyl-Ether | NO | .7 | ppb | 0 | 0 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | .54 | ppb | 0 | 6 | Discharge from rubber and chemical Factories |

| TEST RESULTS- Well 27 @ Plant Id: 10 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .052 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nickle | NO | 3 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Nitrate (as Nitrogen) | NO | 8.1 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.2 | ppb | 0 | 6 | Discharge from rubber and chemical Factories |
| **Radioactive Contaminants** | | | | | | |
| Alpha emitters | NO | 2 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants** | | | | | | |
| Metolachlor | NO | 3.5 | ppb | 0 | 0 | Runoff from farm activities |
| Radon | NO | 2375 | pCi/L | 0 | 15 | Erosion of natural deposits. |

| TEST RESULTS- Well 28 @ Plant Id: 11 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .131 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 5.4 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides Well 28** | | | | | | |
| Atrazine | NO | .081 | ppb | 3 | 3 | Runoff from herbicide used on row crops |

| | | | | | | |
|---|---|---|---|---|---|---|
| Di(2-ethylhexyl) phthalate | NO | 1.1 | ppb | 0 | 6 | Discharge from rubber and chemical factories |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 4 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Combined radium | NO | 2 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 8 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants** | | | | | | |
| Radon | NO | 3305 | pCi/L | 0 | 0 | Erosion of natural deposits |

| TEST RESULTS-Well 29 @ Plant Id: 11 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .039 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nitrate (as Nitrogen) | NO | 5.3 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| Atrazine | NO | .191 | ppb | 3 | 3 | Runoff from herbicide used on row crops |
| Di(2-ethylhexyl) phthalate | NO | 1.1 | ppb | 0 | 6 | Discharge from rubber and chemical factories |
| **Radioactive Contaminants** | | | | | | |
| Beta/photon emitters | NO | 4 | pCi/L | 0 | 50 | Decay of natural and man-made deposits |
| Combined radium | NO | 2 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 8 | pCi/L | 0 | 15 | Erosion of natural deposits |
| Radon | NO | 4405 | pCi/L | 0 | 0 | Erosion of natural deposits |

| TEST RESULTS-Well 31 @ Plant Id: 12 | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Barium | NO | .039 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Nickle | NO | 2 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Nitrate (as Nitrogen) | NO | 7.4 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides Well 31** | | | | | | |
| Di(2-ethylhexyl) phthalate | NO | 1.2 | ppb | 0 | 6 | Discharge from rubber and chemical factories |

| Radioactive Contaminants | | | | | | |
|---|---|---|---|---|---|---|
| Alpha emitters | NO | 2 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Unregulated Contaminants** | | | | | | |
| Metolachllor | NO | .7 | ppb | 0 | 0 | Runoff from farm activities |

| TEST RESULTS-Well 32 @ Plant Id: 13 OUT OF SERVICE | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| Nitrate (as Nitrogen) | NO | 6.2 | ppm | 10 | 10 | Runoff from fertilizer use; leaching from septic tanks, sewage; erosion of natural deposits |
| Barium | NO | .011 | ppm | 2 | 2 | Discharge of drilling wastes; discharge from metal refineries; erosion of natural deposits |
| Chromium | NO | 2 | ppb | 100 | 100 | Discharge from steel and pulp mills; erosion of natural deposits |
| Nickle | NO | 3 | ppb | 100 | 100 | Erosion of natural deposits or leaching. |
| Arsenic | NO | 1 | ppb | 0 | 10 | Erosion of natural deposits; runoff from orchards; runoff from glass and electronics production wastes. |
| **Radioactive Contaminants** | | | | | | |
| Combined radium | NO | .5 | pCi/L | 0 | 5 | Erosion of natural deposits |
| Alpha emitters | NO | 2 | pCi/L | 0 | 15 | Erosion of natural deposits |
| **Synthetic Organic Contaminants including Pesticides and Herbicides** | | | | | | |
| **Unregulated Contaminants** | | | | | | |
| Sodium | NO | 5.74 | ppm | 0 | 0 | Erosion of natural deposits |
| Manganese | NO | .075 | ppm | 0 | 0 | Erosion of natural deposits |

| TEST RESULTS-Distribution System for the Town of Hampstead | | | | | | |
|---|---|---|---|---|---|---|
| Contaminant | Violation Y/N | Level Detected | Unit Measurement | MCLG | MCL | Likely Source of Contamination |
| **Inorganic Contaminants** | | | | | | |
| 1. Copper 90th Percentile (2006) | NO | .266 | ppm | 1.3 | AL=1.3 | Corrosion of household plumbing systems; erosion of natural deposits; leaching from wood preservatives |
| 2. Lead 90th Percentile (2006) | NO | 8 | ppb | 0 | AL=15 | Corrosion of household plumbing systems, erosion of natural deposits |

Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant you should ask advice from your health care provider.

*We constantly monitor the water supply for various constituents. We have detected radon in the finished*

*water supply in eleven out of eleven samples tested. There is no federal regulation for radon levels in drinking water. Exposure to air transmitted radon over a long period of time may cause adverse health effects. If you have questions regarding radon please contact the Environmental Protection Agency's Radon Hotline 1-800-SOS-RADON.*

MCL's are set at very stringent levels. To understand the possible health effects described for many regulated constituents, a person would have to drink 2 liters of water every day at the MCL level for a lifetime to have a one-in-a-million chance of having the described health effect.

What does this mean?

As you can see by the table, our system had no violations. We're proud that your drinking water meets or exceeds all Federal and State requirements. We have learned through our monitoring and testing that some constituents have been detected. The EPA has determined that your water **IS SAFE** at these levels.

## What about lead in the water?

If present, elevated levels of lead can cause serious health problems, especially for pregnant women and young children. Lead in drinking water is primarily from materials and components associated with service lines and home plumbing. The Town of Hampstead is responsible for providing high quality drinking water, but cannot control the variety of materials used in plumbing components. When your water has been sitting for several hours, you can minimize the potential for lead exposure by flushing your tap for 30 seconds to 2 minutes before using water for drinking or cooking. If you are concerned about lead in your drinking water, you may wish to have your water tested. Information on lead in drinking water, testing methods, and steps you can take to minimize exposure is available from the EPA Safe Drinking Water Hotline at 1-800-426-4791 or at *http://www.epa.gov/safewater/lead.*

The Town of Hampstead works hard to provide top quality water to every customer. We accomplish this while keeping our water rates low. Unfortunately, the costs associated with the seemingly endless flow of new regulations and rapidly increasing costs for electricity, chemicals and other factors of production are forcing the Town to increase water rates. In the past, some of our costs have been offset by development impact fees. As the rate of development in Hampstead has slowed, so has this source of revenue.

Thank you for allowing us to continue providing your family with clean, quality water this year.

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Ken Decker, Town Manager

# PROTECT OUR AQUIFER

Hampstead depends on its aquifer for drinking water. Before you pour something on the ground or into a storm drain... ask yourself, "Is this something I want to drink?" The same rain that recharges our aquifer can carry contaminants into our water supply. Here are a few ways you can help protect our aquifer:

1. **Storm drains are for stormwater.** Many of our storm drains are marked "Chesapeake Bay Drainage" because our surface runoff feeds the Chesapeake Bay. Stormwater not only runs into the Bay, but some seeps into the ground and recharges our aquifer. Don't pour anything into a storm drain! If you see someone dumping fluids or trash into a storm drain, call Town Hall at 410-239-7408.

2. **Maintain your car.** One of the most serious problems we face is contamination left on roads and driveways by leaking motor oil, gasoline and antifreeze. Stormwater runoff may wash these chemicals into storm drains and eventually, into the aquifer. Clean up spills. Fix fluid leaks promptly.

3. **Dispose of waste automotive fluids such as motor oil and antifreeze by recycling.** The Town offers free waste oil disposal at its Public Works Facility on Gill Avenue.

4. **Use pesticides and fertilizers sparingly.** When use is necessary, use these chemicals only in the recommended amounts. Avoid spreading chemicals on sidewalks, driveways and streets. Use organic mulch or pest control methods when possible.

5. **Don't overwater your lawn.** Use a soaker hose rather than a sprinkler. Conserve by watering lawns and gardens in the evenings or at night to cut down on evaporative water loss. Set water to the proper level to make sure there is no spillover into the streets that can carry contaminants into our stormwater system.

6. **Don't blow lawn clippings or yard waste into the street.** A heavy rain will wash these clippings into the stormwater system and eventually into our streams.

7. **Pick up after your pets.** Leaving pet waste on the ground increases public health risks by allowing harmful bacteria and nutrients to wash into storm drains and eventually into our local waterways.